

IN THE SPECIFICATION

Please amend paragraph 3 on page 6 as follows.

[0025] At this point, when the dynamic range of class tap is taken to be DR; the bit allocation is taken to be m, the data ~~level~~ value of each class tap to be L; and the quantization code is taken to be Q, the ADRC circuit conducts the quantization by evenly dividing data between the maximum value MAX and the minimum value MIN into areas by the specified bit length, according to the following EQUATION (1).

Please amend Equation 4 on page 12 (paragraph 5) as follows.

$$\begin{aligned} W[k] &= 0.54 + 0.46 \cos(\pi * k / N) \quad (k=0, \dots, N-1) \quad \dots(4) \\ w[k] &= 0.54 - 0.46 \cos\left(2\pi \frac{k}{n}\right), \quad \left[k = 0, \dots, n-1 \right] \quad (4) \end{aligned}$$

Please amend paragraph 2 on page 13 as follows.

[0046] In this connection, in Equation (4), "N" shows the number of samples of the correlation windows, and "u" "k" shows the ~~u-th~~ k-th sample data.

Please amend paragraph 1 on page 15 as follows.

[0052] The ~~judgement~~judgment operation unit 42 is to judge the cutting-out ranges in the time-axis of the input audio data D10 based on the self correlation coefficients supplied from the self correlation coefficient calculation units 40 and 41. And if there exists a ~~big difference~~ deviation between the value of the self correlation coefficient D40 and the value of the self correlation coefficient D41 supplied from the self correlation coefficient calculation units 40 and 41 respectively, this shows that the condition of audio waveform expressed in digital, which is contained in the correlation window AR1 and the condition of audio waveform expressed in digital, which is contained in the correlation window AR2 are ~~extremely~~ different. That is, this shows that audio waveforms of the correlation windows AR1 and AR2 ~~are in an abnormal condition with~~ have no similarity.

Please amend paragraph 2 on page 16 as follows.

[0056] On the other hand, in the case where there is no ~~big difference~~ deviation between the value of the self correlation coefficient D40 and the value of the self correlation coefficient D41 supplied from the self correlation coefficient calculation units 40 and 41 respectively, this shows that the condition of audio waveform expressed in digital, which is contained in the correlation window AR1 and the condition of audio waveform expressed in digital, which is contained in the correlation window AR2 are not different ~~extremely~~, i.e., this shows that the audio waveforms are similar ~~in the normal conditions with~~ similarity.

Please amend paragraph 3 on page 17 as follows.

[0061] On the other hand, if there is no ~~big different~~ deviation between the value of self correlation coefficient D40 and the value of self correlation coefficient D41 supplied from the self correlation coefficient calculation units 40 and 41, this means that audio waveforms are similar ~~in the normal condition with similarity~~. Hence, the judgement operation unit 42 does not raise the correlation class D15 expressed by one bit (i.e., "0") and supplies this to the class-classification unit 14.

Please replace Equation 10 on page 26 (paragraph 9) as follows.

$$\frac{\partial e^2}{\partial w_i} = \sum_{k=0}^M 2 \left[\frac{\partial e_k}{\partial w_i} \right] c_k = \sum_{k=0}^M 2 x_{ki} \cdot c_k = \sum_{k=0}^M 2 x_{ki} \cdot c_k$$

(i = 1, 2, ... n)

... (10)

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(i = 1, 2, ... n)

... (10)

Please amend paragraph 2 on page 28 as follows.

[0098] Accordingly, in the learning circuit 30, the student signal generating filter 37 conducts the thinning processing of teacher audio data with high sound quality, taking ~~the~~an interpolation processing in the audio signal processing device 10 into consideration, thereby obtaining the prediction coefficients for the interpolation processing in the audio signal processing device 10.